

ACEC-DOT BRIDGE SUBCOMMITTEE

Minutes of August 7, 2006 Meeting

Attendees:

Greg Perfetti, NCDOT (Co-Chair)
Tom Koch, NCDOT
Lonnie Brooks, NCDOT
Tom Tallman, WSA (Co-Chair)
Tim Rountree, RWA
Domenic Coletti HDR Engineering
Rodney Money, TY Lin
Andy Batts (Simpson Engineering)
Peter Graf (LPA)

I. Membership on Committee

Peter Graff and David Simpson (Andy Batts substituting for David at this meeting) were introduced as new members of the committee. Tom Tallman will preside as Co-Chair for the 2006/2007 year.

II. Joint Training Opportunities

NCDOT is looking to have an NHI LRFD Substructure design course in late January or early February. Tom Koch (NCDOT) has not been able to confirm a date at this time. It is not known whether there will be slots available for PEF's or not. It was discussed that ACEC should look into hosting their own session at about the same time. NCDOT is looking at the 3-day session at a cost of \$450 per participant. There is a shorter 1-day session at a lower cost that ACEC may want to consider as well.

A Bridge Design Workshop was held on July 18, 2006 on "Bridge Constructability Issues – Lessons Learned". Mr. Ron Hancock, PE (NCDOT State Bridge Construction Engineer) and Mr. Randall Gattis (Sanford Contractors, Inc.) were the guest speakers. The general consensus was that it was well received and very informative. Overall the bridge design workshop series has been considered to be successful and that we should continue offering it.

The next Bridge Design Workshop is being planned for sometime in September, however, a formal date has not been set. The topic will be "Accelerated Construction Techniques". Tom Koch (NCDOT) and Rodney Money (TY Lin) will be spearheading this event.

III. Updated Structure Design Standard Drawings

The updated structure standard drawings which comply with the 2006 specifications are currently on the Structure Design Unit's web site. Due to some projects still being let under the old specification, it was decided to make the old standards also available on the web site (initially they were removed when new standards were placed on the web site). A list of the project special provisions that were incorporated into the 2006 standard specifications can also be found on the Structure Design Unit's web site under Special Provisions.

The new Structure Design standards have removed the details that used to be located off to the side of the sheets within the dgn file. Structure Design is currently discussing how these details will be made available to the PEF's in the future (i.e. make cell libraries accessible, etc.). In the meantime, if these details are needed, PEF's simply need to request them and they will be provided.

IV. Conversion to LRFD

Greg Perfetti noted several LRFD design examples are available and can be found on the web. Tom Koch provided the web links with directions:

(1) LRFD Steel superstructure and substructure Example:
<http://www.fhwa.dot.gov/bridge/lrfd/examples.htm>

(2) The second (a horizontally curved steel bridge) is a little more effort-- it requires that you register as an AASHTO E-affiliate:

To register at the AASHTO online bookstore, go to
<https://bookstore.transportation.org> and click on "Become an AASHTO E-Affiliate."

Once you have registered, at your online account click on "Free Digital Publications".

Then, choose the following:

GHC-4-I1 AASHTO LRFD Design Examples - Horizontally Curved Steel Bridges (2 files)

It was also noted that NCDOT is planning on adopting the LRFD specification in its entirety which includes the curved girder specifications.

V. Bridge Policy Changes

The following policy memos have been issued since the May meeting:

Existing Structure on General Drawing – Due to permitting issues, it is now required not to label “existing structure to be removed”, but to simply label “existing structure”. The specifications will handle how much of the structure is to be removed.

New Guardrail Anchor Unit – A new guard rail anchor unit for attaching to Jersey barrier rails will be used. This new detail will do away with the barrier rail transition on the approach slab since the anchor attaches directly to the Jersey barrier rail at the end of the bridge superstructure.

All of these memos are available on the Structure Design Web Page at:

<http://www.doh.dot.state.nc.us/preconstruct/highway/structur/polmemo/>

VI. Status of Potential PEF Advertisements

The following projects were provided by Lonnie Brooks as potential future projects for PEF's;

- Mid-September '06 advertisement:
U-3308 – 1 grade separation and 2 RR underpasses; let date July '09
- Advertisement date pending:
U-2519 – 1 bridge; let date May '08
- December '06 advertisement:
X-2B – 1 bridge; let date Nov. '08
U-2579 – RR underpass; let date Nov. '09
R-2633B – multiple bridges including RR overheads, grade separations and stream crossings; let date June '09
- May '07 advertisement:
U-3459 – RR overpass; let date Nov. '09

VII. Status of Design-Build Projects

Design build Information is available on the Project services Unit Web page at:

http://www.doh.dot.state.nc.us/construction/ps/altern/design_build/default.html

VIII. Next Meeting

The next bridge subcommittee meeting will be on **Monday, November 6, 2006** at 9:00 a.m. in Structure Design Conference Room B.